Alert Point

Installation Guide & User Manual

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Introduction

The Alert Point is an aesthetically pleasing, robust and fully featured stand alone alarm system. Powered with a 9 VDC alkaline battery, the Alert Point includes an integral sounder and resettable call point.

Manufactured from tough polycarbonate, the Alert Point is designed for use in industrial as well as commercial or retail applications.

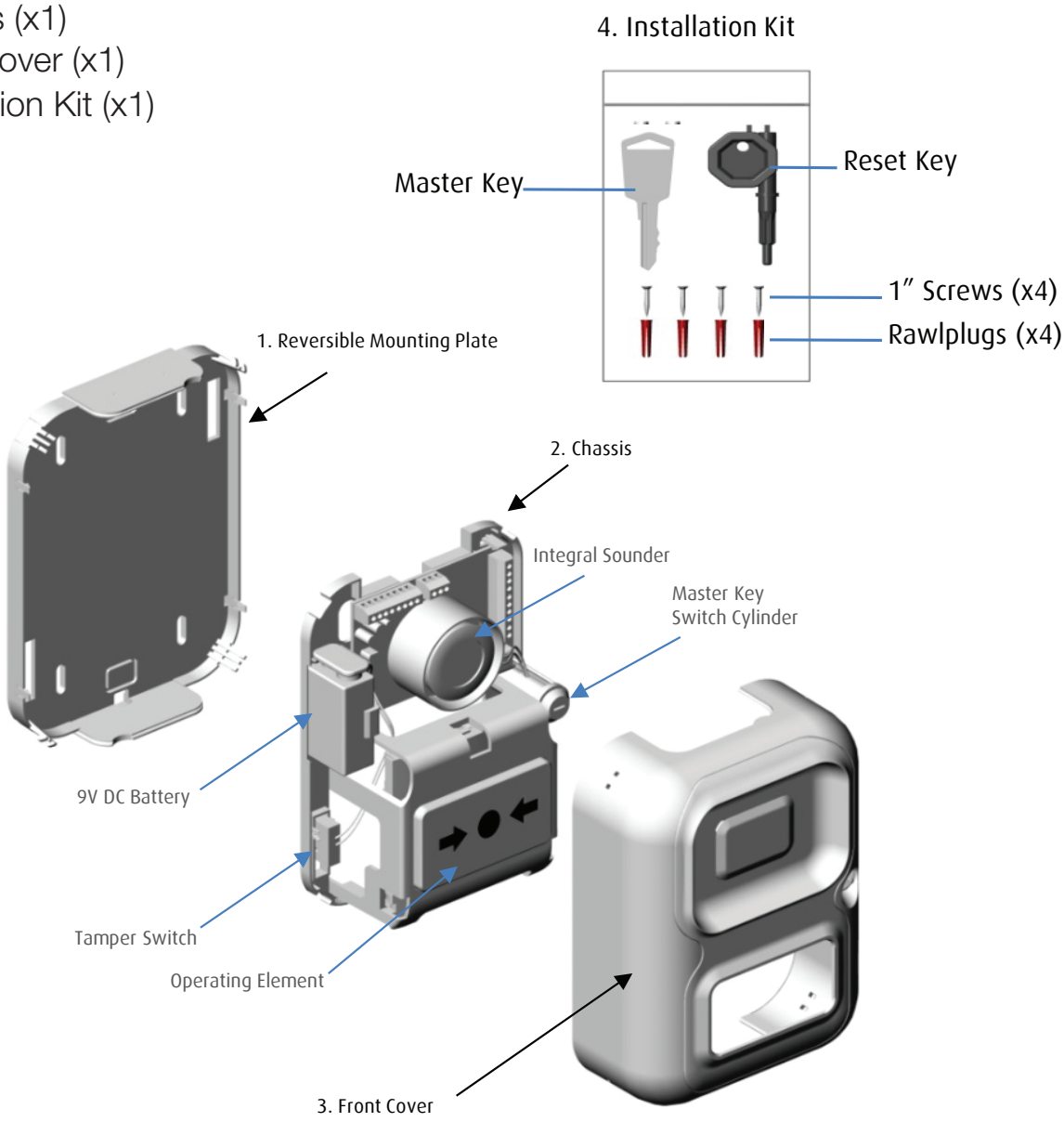
Quick and easy to install and providing protection within minutes, the Alert Point is an ideal solution for establishments that have a requirement for a simple but effective alarm system. They may include: industrial/temporary buildings, warehouses, portacabins, churches, car parks, small offices and holiday parks etc. Where an EN54 fire system is decommissioned on a construction site, the Alert Point is ideal as a temporary system for raising an alarm in the event of an emergency.

Available in a variety of colours, the Alert Point can be used for a wide range of applications such as fire, intruder, panic, evacuation, assist or general alarm. It also incorporates a tamper switch to prevent unauthorised removal or misuse.

Box Contents & Key Components

Contents

1. Reversible Mounting Plate (x1)
2. Chassis (x1)
3. Front Cover (x1)
4. Installation Kit (x1)



Specifications

Power source	9 VDC battery (supplied) or 12-30 VDC
Standby current	45µA
Alarm current	28mA low volume / 32mA high volume
Operating temperature	0ºC to 49ºC
Sounder output (at 1 metre)	95 dB – 102 dB
Sounder tones	7
Tamper tone	1
Network	>2 Alert Points spaced less than 50m apart

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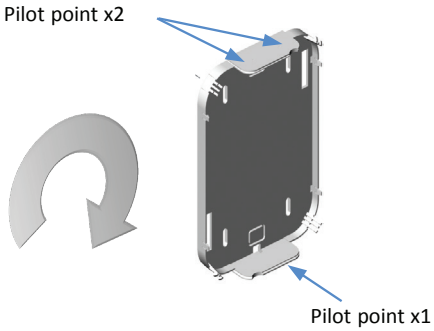
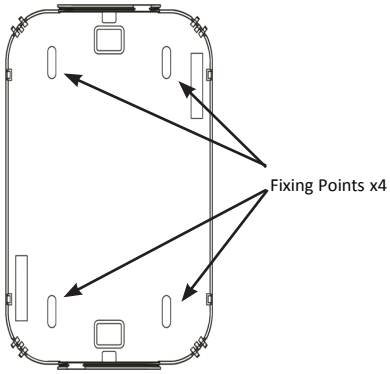
Step 1. Install the Reversible Mounting Plate

The reversible mounting plate can be installed in any orientation; depending on the required conduit entry and exit points.

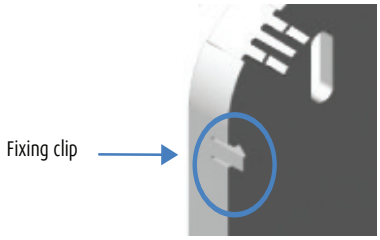
Mark the 4 fixing points (as shown) and install using the screws and Rawl plugs provided.

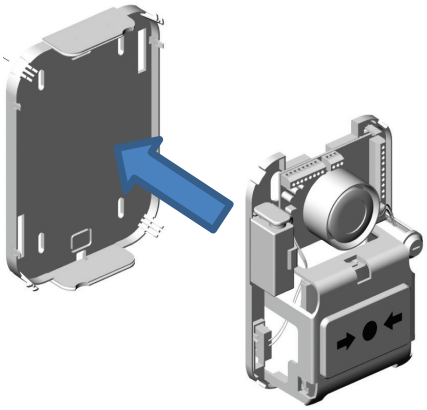




Step 2. Attaching the chassis

Attach by pushing the chassis over the 4 fixing clips on the mounting plate (highlighted).



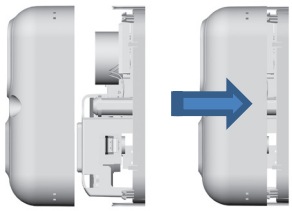


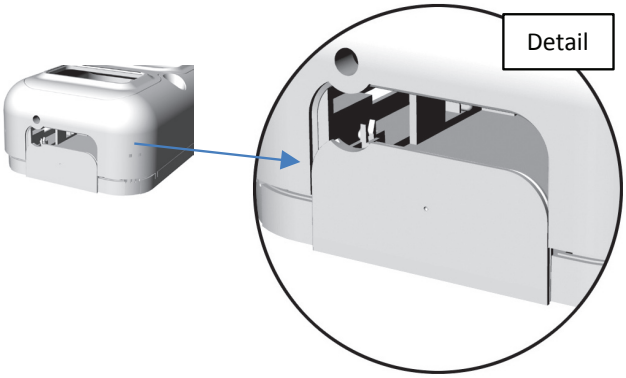
Step 3. Consult the User Manual for other programmable features

(Programmable Features page 8 & DIL switch settings page 19)

Step 4. Attach front cover

Line up each end using the channels located on the raised conduit sections (see detail). Push evenly until the cover locks into place via 4 raised mounting clips situated on each corner.





Step 5. Turn the unit `ON'

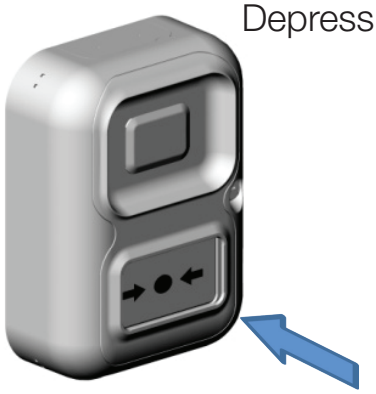
Horizontal position - '0FF'.

Vertical position - 'ON'.

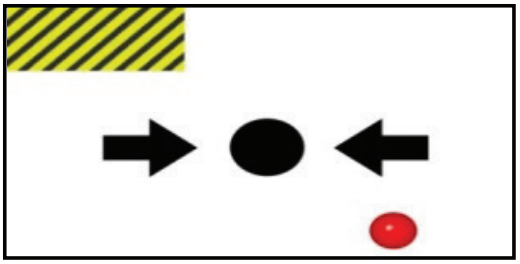
Using the Master Key, turn the Key Switch Cylinder to the Vertical position. The LED will flash green when turned 'ON' – unit in ;standby condition.'

Step 6. Test

Depress the operating element.



A warning indicator drops into view, the unit will alarm and the LED will turn red when the Alert point is activated.



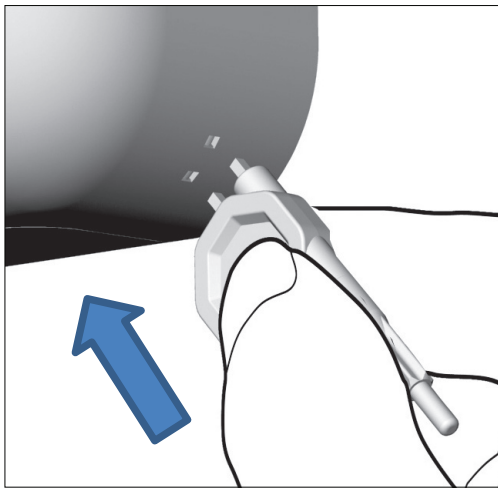
Step 7. Reset the unit

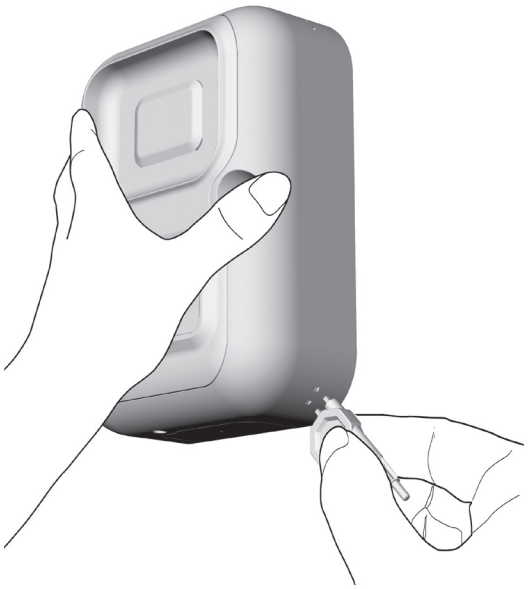
Simply insert the reset key into the bottom of the Alert Point.

A quick turn of the key and the Alert Point is reset, returning to 'standby condition' and is ready for use straight away.

Removal of the front cover

Using the 2 pips on the reset key provided, push firmly into each of the 4 corner clips individually, releasing them, whilst at the same time gently pulling the cover away from the remainder of the unit.





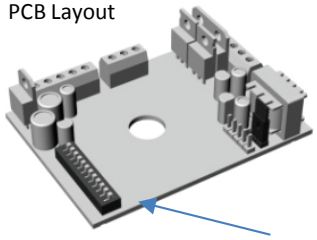
User Manual

Programmable Features Settings

1. Integral Sounder Tones: DIL Switch No SW1 - SW3

The Alert Point has seven different selectable alarm tones ranging from 95 dB to 102 dB, along with a prefixed tamper tone.

PCB Layout



DIL Switch

2. External Power Provided (12-30 VDC): DIL Switch No SW4

This setting allows the unit to be run from an external power source.

3. Relay Setting: DIL Switch No SW5

When part of a network, this setting allows the option of sending a triggering signal via the relay to an alarm panel, either:

- Relay is only triggered on the activated unit
- Relay sends triggering signal even when another unit is activated.

4. External Sounder/Strobe Trigger: DIL Switch No SW6

This setting allows the option of sending a triggering signal to externally fitted sounders, along with strobes/beacons.

5. Internal & External Sounder Timer Options: DIL Switch No SW7 & SW8

4 alarm durations are available and can be selected by changing the DIL switch settings. These are: continuous, 30 seconds, 3 minutes and 20 minutes.

If any duration period other than `continuous' is used, the alarm will silence after the selected time has elapsed. The LED will continue to flash red until the unit is reset using the reset key.

6. External Strobe Timer Options: DIL Switch No SW9 & SW10

4 strobe durations are available and can be selected by changing the DIL switch settings. These are: continuous, 30 seconds, 3 minutes and 20 minutes.

If any duration period other than 'continuous' is used, the strobe will cease flashing. The Alert Point will still need to be reset, the LED will still flash red until this has been done.

7. Key Switch – Manual or Auto Reset: DIL Switch No SW11

This allows the user greater control if misuse becomes a major factor.
Auto reset: The Alert Point will fully reset after activation when using the reset key.
Manual: Even if the Alert Point is reset after activation using the reset key, all sounders and strobes will continue to run until the unit is reset using the master key switch.

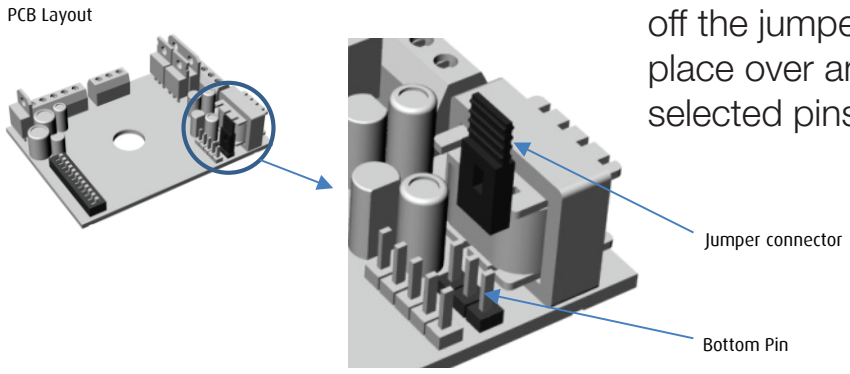
8. Networking the Alert: DIL Switch No SW12

If this switch is 'ON' the Alert Point expects to be connected to another Alert Point otherwise a fault is indicated. If the switch is 'OFF' the Alert Point will not expect to be connected to another Alert Point.

Note: DIL Switch settings are shown on page 19

Integral sounder volume: The Alert Point has 2 volume settings – High and Low: this is determined by the position of the jumper connector configuration show below.

High: Jumper between centre pin and bottom pin (factory setting)
Low: Jumper between centre pin and top pin



To adjust the volume setting, lift off the jumper connector and then place over and push onto the selected pins

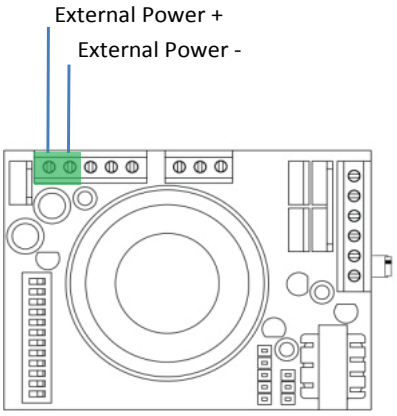
Note: Silencing the Alert Point is possible by not having the jumper fitted, but no sound will be produced by the integral sounder during alarm, fault or tamper conditions.

Low battery check: The Alert Point monitors the output power of the 9 VDC battery in 16 minute cycles. If the battery falls below the recommended power level the unit will display a fault, emitting a periodic single beep.

Battery life: The working life of the 9 VDC battery under normal `standby' condition is a minimum of 15 months: it is recommended that this battery is replaced at least every 15 months.

Battery back up: When the Alert Point is powered by a 12-30 VDC power supply, the 9 VDC battery will become a backup if the external power is lost. The unit will display a fault until the external power has been restored.

Installing External 12-30 VDC Power Supply



Step 1. Ensure that the unit is switched 'OFF'.
Step 2. Insert the external power wires into the correct terminals.
Step 3. Connect the 9 VDC battery. The battery must be fitted as it will become a backup if there is a power failure.
Step 4. DIL switch SW4 – should be `ON' (external power required).
Step 5. Turn the unit `ON' using the master key switch.
Step 6. The LED will illuminate to a constant green indicating that the unit is functioning correctly.

Alarm Condition: If the unit is activated in the event of an emergency (depression of the operating element) it will immediately emit an alarm tone for the duration selected, an activation flag will drop into view and the LED will flash red every 8 seconds until the unit is reset.

Resetting Unit:

1. DIL switch settings: changes will only take effect when the unit has been powered back up using the master key switch.
2. Silencing Alarm : If the operating element has been depressed the reset Key is to be used to reset the unit, returning it to Standby Mode.

Note: the master key switch can be used to silence the alarm but this will turn the unit 'OFF' and the alarm will continue to sound when the unit is turned back `ON'.

Power Loss: In the event of any loss of power, the LED will turn red and emit a short beep every 90 seconds. The unit will still run safely using the 9 VDC battery as a back up. As soon as power is restored the unit will automatically return to the `standby' condition.

Low or No Battery: If the unit is reset but the battery is at low power or not attached a fault will be indicated – the LED will turn red and the unit will emit a short single beep every 90 seconds.

The unit automatically checks for low battery status every 16 minutes, during this period if the battery falls into low battery condition (or is disconnected in the presence of an external power source), the LED will turn red and emit a short beep every 90 seconds upon detection at the end of any 16 minute cycle. The battery will either need replacing or reconnecting and the unit reset before it will return to a standby condition.

Installing External Sounders

Step 1. Ensure that the unit is switched 'OFF'.

Step 2. Insert the external sounder wires into the correct terminals.

Step 3. DIL switch SW6 – should be 'OFF' (external sounders/strobes to trigger during alarm condition).

Important: Please ensure all sounders have their own power source and are wired correctly in accordance with their own installation manuals.

Warning: Incorrectly installed external devices may cause irreversible damage to the Alert Point.

Step 4. Turn the unit 'ON' using the master key switch.

Step 5. The LED will now flash green every 8 seconds (or will remain constant if connected to an external power supply), indicating that the unit is functioning correctly.

Step 6. Test: When the operating element is depressed, the unit will go into alarm condition: the externally installed sounders should now sound.

Step 7. Reset the Alert Point using the reset key, all sounders should now silence.

Please note: If the 'Auto Reset' is disabled (DIL switch SW11 'OFF') the sounders will continue to sound until the master Key switch is turned 'OFF'. When turned back 'ON' the unit should be in 'standby' condition.

IMPORTANT: Enabling/Disabling external sounders will also enable/disable any strobes or beacons also wired to this unit.

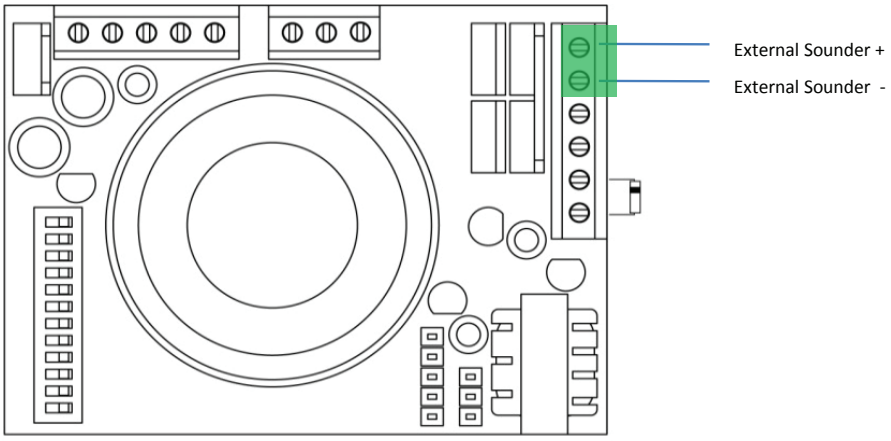


Diagram of PCB terminal layout

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Step 1. Ensure that the unit is switched 'OFF'.

Step 2. Insert the external strobe/beacon wires into the correct terminals.

Step 3. DIL switch SW6 – should be 'OFF' (external sounder(s)/strobes(s) to trigger during alarm condition).

Important: Please ensure all external strobe(s)/beacon(s) have their own power source and are wired correctly in accordance with their own installation manuals.

Warning: Incorrectly installed external devices may cause irreversible damage to the Alert Point.

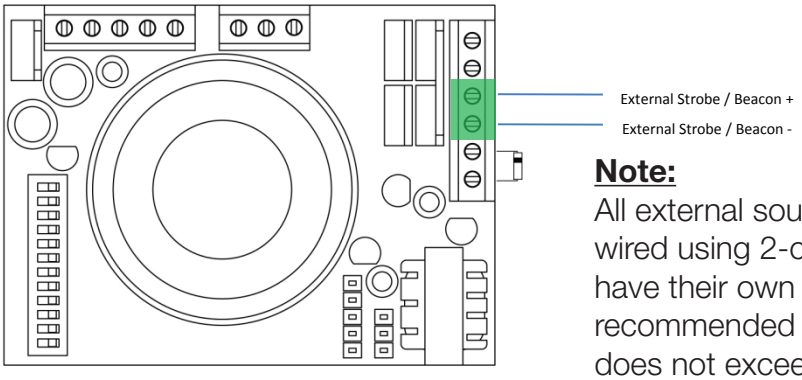
Step 4. Turn the unit 'ON' using the master key switch.

Step 5. The LED will flash green every 8 seconds (or will remain constant if connected to an external power supply), this indicates that the unit is functioning correctly.

Step 6. Test: When the operating element is depressed, the unit will go into alarm condition: the externally installed strobe(s)/beacon(s) should now flash.

Step 7. Reset the Alert Point using the reset key, all strobe(s)/beacon(s) should now cease flashing.

Please note: If the 'Auto Reset' is disabled (DIL switch SW11 'OFF') the strobe(s)/beacon(s) will continue to flash until the master key switch is turned 'Off'. When turned back 'On' the unit should be in 'standby' condition.



Note:
All external sounders must be hard-wired using 2-core cable, and must have their own power supply. It is recommended that external wiring does not exceed 50 metres.

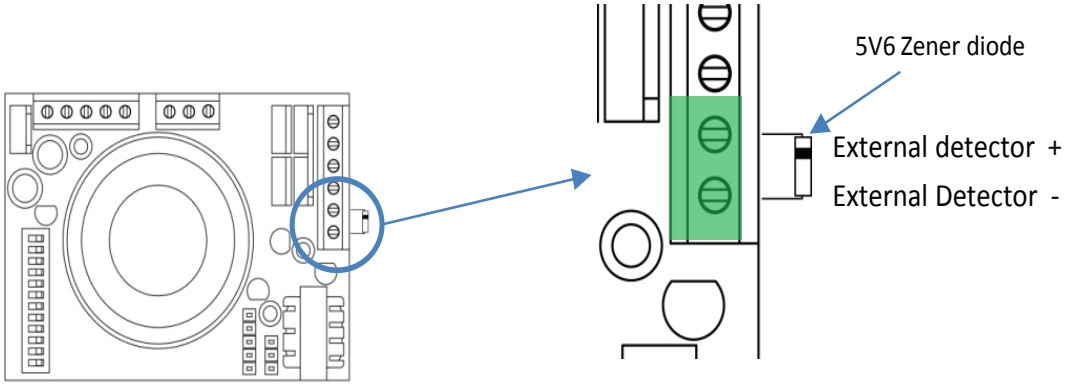
Optional Internal Beacon

An optional extra (not supplied as standard) for the Alert Point is the capacity to incorporate an internal beacon – this can provide for those who may be audibly impaired.

With the front cover removed

Step 1. Ensure that the unit is switched 'OFF'.

Step 2. Disconnect the Zener diode.



Important: Please ensure all detectors have their own power source and are wired correctly in accordance with their own installation manuals.

Warning: Incorrectly installed external devices may cause irreversible damage to the Alert Point.

Step 3. Insert the external detector wires into the correct terminals, tighten down the corresponding terminal screws ensuring wires are securely trapped.

Step 4. There is no DIL switch setting change to activate the external detectors, the Alert Point is constantly monitoring for a loop connection. The Zener diode creates the loop and must remain connected to the detector terminals at all times even if no detectors are being used. If the Zener diode is removed the Alert Point will trace a break in the loop and signal a fault. The Zener diode must be installed at the end of line when linking detectors off the detector terminals otherwise a fault will be signalled.

Step 5. Turn the unit `ON' using the master key switch.

Step 6. The LED will now flash green every 8 seconds (or will remain constant if connected to an external power supply), indicating that the unit is functioning correctly.

Step 7. To test the installation of the external detectors, firstly trigger one of the external detectors, this should send the Alert Point into 'alarm 'condition.

Please note: The Alert Point will only return to 'standby' condition, after the triggered detector has been reset.

It is recommended that the maximum wiring length from the detector terminals on the Alert Point to the final detector in the loop, should not exceed more than 50 metres.

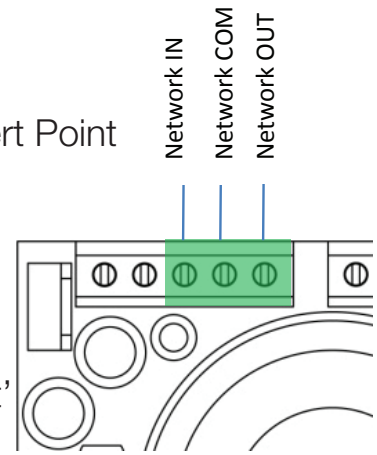
Any alarm condition to one of the Alert Points, will also trigger the linked units' integral sounder and the LED (flash red) to indicate the fault. Any external output devices that are installed to any of the Alert points will also be activated if programmed to do so.
Note: It is recommended that wire lengths between individual units do not exceed 50m (including 'return loop' wire between last & first units).

Networking only 2 units - (ensure the front cover is removed)

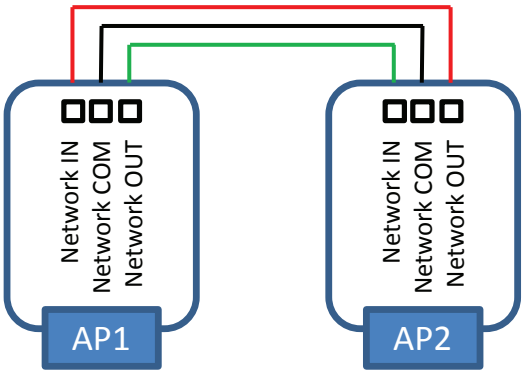
Step 1. Ensure that both units are switched 'OFF'.

Step 2. DIL switch SW12 should be 'ON' on both units (the Alert Point expects to be connected to a second unit).

Step 3. Alert Point 1: Insert wires into the network terminals on the Alert Point (as shown opposite).



Step 4. Alert Point 2: When connecting into the network terminals ensure the 'Network In' and the 'Network Out' wires are switched over (as shown below).



Step 5. Turn both units 'ON' using the master key switch.

Step 6. Both LEDs will now flash green approximately every 8 seconds indicating that both units are functioning correctly.

Step 7. TEST: Alert Point 1:
Depress the operating element, this will send the Alert Point into 'full' alarm condition, with the activation flag dropping into view, the LED flashing red and integral alarm sounding.
Alert Point 2:
Will immediately trigger into alarm, the LED will flash red and the integral alarm will sound.

Resetting the networked Alert Points, can only be done by manually resetting the original activated unit (e.g. Alert Point 1 from this test) using the reset key. This will return both units back into 'standby 'condition.

Step 8. The above test should now be reversed.

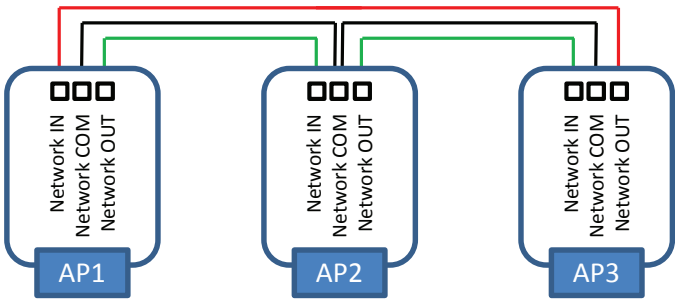
Networking 3 or more units - (ensure the front cover is removed)

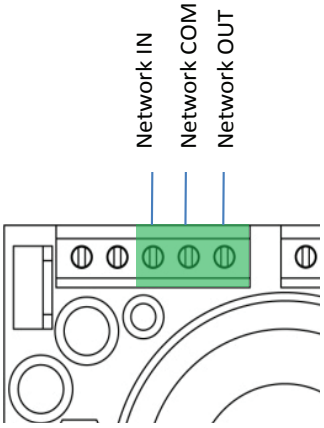
Step 1. Ensure that all of the units are switched 'OFF'.

Step 2. DIL switch SW12 should be 'ON' on all of the units (the Alert Point expects to be connected to another unit).

Step 3. Connect the 'Network COM' terminals by inserting a wire into unit #1, and linking this to the same terminal on unit #2. Now do the same by connecting an additional wire to the 'Network COM' terminal on unit #2, and linking this to the same terminal on unit #3. Repeat this for subsequent units until all units are linked.

Step 4. Insert a wire into the 'Network Out' terminal on unit #1, and link this to the 'Network In' terminal on unit #2. Now insert a wire into the 'Network Out' terminal on unit #2 and link this to the 'Network In' terminal on unit #3. Repeat this for each subsequent unit.





Step 5. Important! On the final unit (e.g. Unit #3) ensure that the 'Network Out' terminal is linked back to the 'Network In' terminal on unit #1, creating a loop. (It is not necessary to do this step for the COM wire).

Step 6. Turn all the units 'ON' using the master key switch.

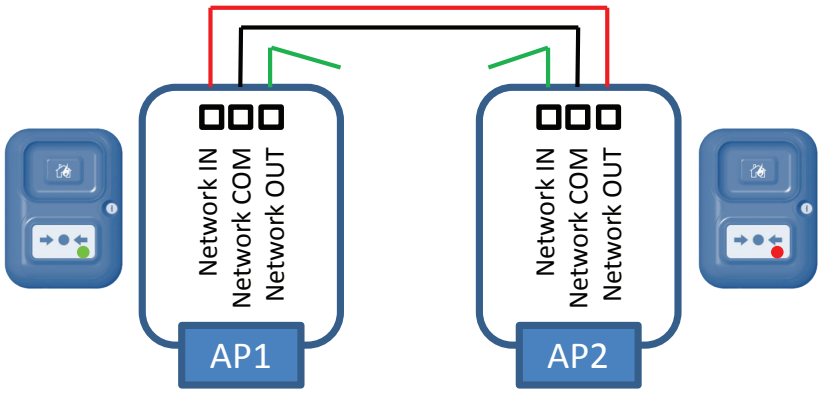
Step 7. TEST

Alert Point 1, depress the operating element. This will send the unit into alarm condition, causing the activation flag to drop into view, the LED to flash red and the integral alarm to sound.

Alert Points 2 & 3 will also immediately trigger into alarm, with LEDs flashing red and their integral alarms sounding.

Step 8. Resetting the networked units can only be done by manually resetting the originally activated unit (showing the activation flag, in this case unit #1) using the reset key. This will return the other units back into 'standby' condition.

Loss of connection between units:
Any loss of connection between the networks will be indicated as a fault (double beep every 90 seconds) this will only be indicated on the unit expecting the input signal.



In the example above the 'Network In' connection is lost on Alert Point 2.
Resulting in:

1. Alert Point 2 - The LED will flash red and a warning double beep will sound every 90 seconds.
2. Alert Point 1 - cannot trigger Alert Point 2 into alarm condition: the signal is lost to the 'Network In' connection on Alert Point 2.
3. Alert Point 2 can still trigger Alert Point 1 into 'alarm' condition as the connection remains intact between the 'Network Out' on Alert Point 2 and the 'Network In' on Alert Point 1.
4. Both units will still continue to work independently.
5. Alert Point 2 will instantly return to its 'standby' condition when the connection is re-made, without* having to reset the unit.

If both units lose their Network In or COMMON connections, they will both signal a fault.

***Note:** to check that the network is functioning correctly whilst avoiding having to wait 90 seconds for verification, turn the unit OFF then back ON using the master key switch (a fault will emit a double beep immediately on startup).

Key Switch – Auto reset: DIL Switch No SW11 'ON' – Auto reset.
If an activated Alert Point is reset back to 'standby condition', a linked Alert Point will instantly return back to its own `standby' condition.

Key Switch – Manual reset: DIL Switch No SW11 'OFF' – Manual reset.
Only if an activated Alert Point is completely reset back to 'standby condition' using the master key switch, will a linked Alert Point reset back to its own 'standby' condition (using the master key switch on a linked Alert Point will have no effect on the network once it has been turned back 'ON,' until the initially activated unit has been attended to.)

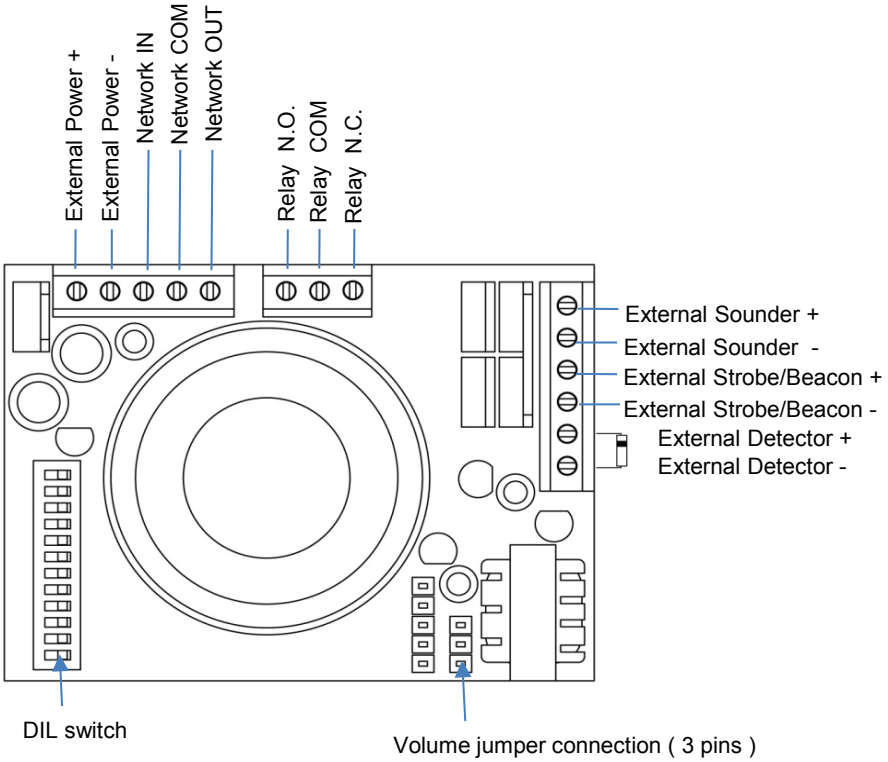
Please note: Tamper switch activation, low battery warning indication and no power source will only be signalled on the affected unit.

Problem	Possible Cause	Possible Solution
No power	9V DC battery clip not connected	Connect correctly
	12-30V DC power source installation fault	Check installation
	Master key switch not turned `ON'	Turn unit `ON' (vertical position)
Tamper alarm sounding	Front cover fitted incorrectly	Check installation
	Reversible mounting plate incorrectly installed	Check installation
The Alert Point is constantly in `alarm' condition	Operating element depressed	Reset using reset key
	Networked - The linked Alert Point is in `alarm' condition	Reset the `networked' Alert Point
	Tamper alarm activating	Check installation
	Externally fitted detectors triggering Alert Point	Check linked units are not alarming
LED red & emitting a short double beep every 90 seconds	Networking DIL switch SW12 `ON' - but no network required	DIL switch SW12 should be `OFF'
	Connection lost between the `networked' Alert Points	Check all wiring connections (including COMMON)
	5V6 zener diode not connected	Check detector terminals
	Externally fitted detector connection broken	Check all wiring connections
LED red & emitting a short beep every 90 seconds	9V DC battery output power insufficient	Low battery - change battery
	DIL switch no. SW4 'ON' - the unit is expecting external power, but not receiving any	Check ext power lead connections / switch 'OFF' SW4 if no ext supply
Reset key not resetting Alert Point when in `alarm' condition	Auto reset option turned `OFF'	DIL switch SW11 should be `ON'
No sound in `alarm' condition	Volume jumper connection loose or missing	Ensure the jumper connection is fitted correctly
External sounders not alarming on activation	External sounder DIL switch SW6 turned `ON'	DIL switch SW6 should be `OFF'
	External sounder connection fault	Check all wiring connections
External strobe / beacons not flashing on activation	External strobe/beacon DIL switch SW6 turned `ON'	DIL switch SW6 should be `OFF'
	External sounder connection fault	Check all wiring connections

General Maintenance:

9 VDC batteries should be replaced every 15 months or sooner. Cleaning should be carried out using only mild, diluted detergents: concentrated solutions and those including (but not limited to) alkalis, strong acids, ethers, amines, aromatic hydrocarbons and alcohols can cause considerable harm to this product.

PCB Terminal Diagram



Terminal connections

External power terminals	12-30 VDC
Relay terminals	Max 30 VDC, 1A
External sounder terminals	All external sounders need to be hard wired using 2 core cable and must have their own power supply.
External strobes / beacons terminals	All external strobes & beacons need to be hard wired and must have their own power supply.
Detector terminals	All detectors need to be hard wired on a N.O. loop, have their own power supply and an end of line 5V6 Zener diode fitted (supplied with the unit).

Using the Alert Point as a Manual Call Point

Using the relay terminals, wire the positive loop connection into the N.O. terminal and the negative loop connection into the COM terminal.

The unit will independently sound during ‘alarm condition’ as well as sending a trigger signal back the alarm panel.

It is recommended that all external detector wiring does not exceed 50 metres.

DIL Switch Settings – Programmable Features

Important: Changes made to any DIL switch settings will only take effect after the Alert Point has been reset using the master key switch.

Features	DIL Switch Setting			Action	
Integral Sounder Alarm Tone	SW1	SW2	SW3	Tone	Sound Pattern
	OFF	OFF	OFF	1	800Hz - 970Hz (Sweep)
	ON	OFF	OFF	2	800Hz - 970Hz (Sweep)
	OFF	ON	OFF	3	988Hz / 250ms - 645Hz / 250ms (Alternating)
	ON	ON	OFF	4	670Hz / 250ms - 845Hz / 370ms (Alternating)
	OFF	OFF	ON	5	800Hz - 970Hz in 330ms (Sweep)
	ON	OFF	ON	6	2400Hz - 2850Hz in 110ms (Sweep)
	OFF	ON	ON	7	2400Hz - 2850Hz in 330ms (Sweep)
	ON	ON	ON	8	Not Implemented
External Power Provided - (12-30V DC)	SW4 ON			External power is to be supplied. NB: absence of power will indicate fault (LED flashing red)	
	SW4 OFF			No external power is to be supplied. NB: absence of power will not indicate a fault	
Relay Mode	SW5 ON			Relay is only triggered on the activated unit in a network	
	SW5 OFF			Unit's Relay activates in a network even if this unit was not triggered	
Disable External Sounders & Strobes / Beacons	SW6 ON			External Sounders/Beacons are NOT triggered during `alarm' condition	
	SW6 OFF			External Sounders/Beacons are triggered during `alarm' condition	
Sounder Duration Timer	SW7	SW8		Sounder Duration	
	OFF	OFF		Sounders run continuously (until manually reset)	
	ON	OFF		Sounders switch off automatically after 30 seconds	
	OFF	ON		Sounders switch off automatically after 3 minutes	
	ON	ON		Sounders switch off automatically after 20 minutes	
Strobe / Beacon Duration Timer	SW9	SW10		Strobe / Beacon Duration	
	OFF	OFF		Strobes / Beacons run continuously (until manually reset)	
	ON	OFF		Strobes / Beacons switch off automatically after 30 seconds	
	OFF	ON		Strobes / Beacons switch off automatically after 3 minutes	
	ON	ON		Strobes / Beacons switch off automatically after 20 minutes	
Auto Reset	SW11 ON			Alert Point returns to `standby' condition after resetting with the reset key	
	SW11 OFF			Alert Point latches in 'alarm' condition until it is manually reset using the master key switch	
Networking the Alert Point	SW12 ON			The Alert Point expects to be connected to another Alert Point, otherwise a fault is indicated (LED flashing / constant red)	
	SW12 OFF			No fault will be indicated if an Alert Point is not connected to another Alert Point, it is not looking for a connection	

Factory settings

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